

## Basic Information

Product Name	Anti-LOX Antibody
Gene Name	LOX
Source	Rabbit
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ELISA
Contents	500 ug/ml antibody with PBS , 0.02% NaN <sub>3</sub> , 1 mg BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human LOX (240-268aa AEENCLASTAYRADVRDYDHRVLLRFPQR), different from the related mouse and rat sequences by one amino acid.
concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	31KD
Dilution Ratios	Western blot(WB):1:500-2000 ELISA: 1:100-1000

## Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

## Background Information

Lysyl oxidase (LOX), also known as protein-lysine 6-oxidase, is a protein that, in humans, is encoded by the LOX gene. The protein encoded by this gene is an extracellular copper enzyme that initiates the crosslinking of collagens and elastin. The enzyme catalyzes oxidative deamination of the epsilon-amino group in certain lysine and hydroxylysine residues of collagens and lysine residues of elastin. In addition to crosslinking extracellular matrix proteins, the encoded protein may have a role in tumor suppression. Defects in this gene are a cause of autosomal recessive cutis laxa type I (CL type I). Two transcript variants encoding different isoforms have been found for this gene.

## Selected Validation Data

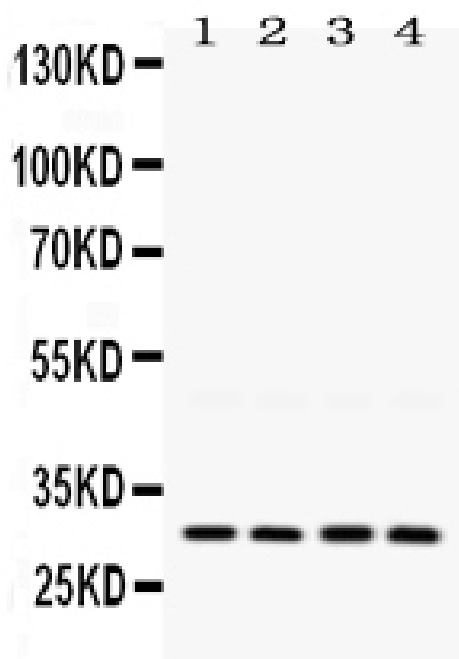


Figure 1. Western blot analysis of LOX using anti-LOX antibody (PB0757). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: Rat Lung Tissue Lysate, Lane 2: Rat Kidney Tissue Lysate, Lane 3: Rat Thymus Tissue Lysate, Lane 4: Mouse Kidney Tissue Lysate. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-LOX antigen affinity purified polyclonal antibody (Catalog # PB0757) at 0.5  $\mu$ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for LOX at approximately 31KD. The expected band size for LOX is at 31KD.